

## Product Description

Zero-cross Switching

Load Current: 10A, 20A@24-440VAC

DC Input

Internal RC Protection CircuitDielectric Strength: 2000Vrms

RoHS Compliant







## Ordering Information



KMGC Series



Load Voltage 380:380VAC



Control Mode D: DC Control



Load Current 10:10Amp 20:20Amp



Control Voltage 12:12VDC 24:24VDC



Customized Code

## General Specifications

Input Specifications (Ta=25°C)		
Control Voltage Range	12VDC	9.6-14.4VDC
	24VDC	19.2-28.8VDC
Must Turn-on Voltage	12VDC	9.6VDC
	24VDC	19.2VDC
Must Turn-off Voltage		2VDC
Maximum Input Current	12VDC	35mA@14.4VDC
	24VDC	20mA@28.8VDC
Turn-on Delay Time (Typical)		80ms±10ms
Maximum Turn-off Time		10ms

Output Specifications(Ta=25°C)		
Load Voltage Range		24 - 440VAC
Maximum Surge Current (@10ms)	10A	100A
	20A	200A
Maximum I²t (@10ms)	10A	50A <sup>2</sup> s
	20A	200A <sup>2</sup> s
Maximum Transient Overvoltage		800Vpk
Maximum Off-State Leakage Current @Rated Load Voltage		5mA
Maximum On-State Voltage Drop @Rated Current		1.6Vrms
Minimum Off-State dv/dt		200 V/µs







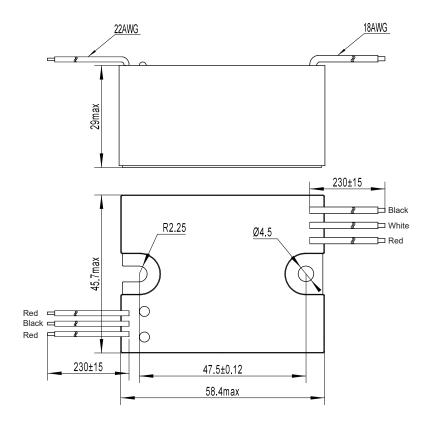


General Specifications (Ta=25°C)		
Dielectric Strength (50/60Hz)	Input/Output	2000Vrms
	Input, Output/Base	2500Vrms
Insulation Resistance (@500VDC)		1000ΜΩ
Ambient Temperature Range		-30°C ∼ +80°C
Storage Temperature Range		-30°C ∼ +100°C
Weight (Typical)		100g

# Applications

Single phase motor control.

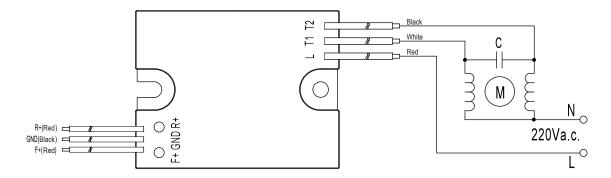
## Outline Dimensions







## Wiring Diagram



Input wiring:

F+: Connect the positive pole of motor forwarding signal

GND: Connect to the negative pole of Common Terminal

R+: Connect to the positive pole of motor reversing signal

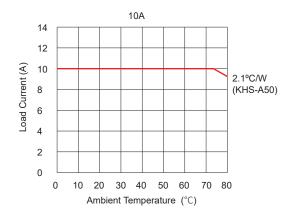
Output wiring:

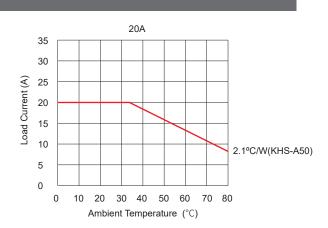
L: Connect to the live line

T1/T2: Connect to the output terminal of motor

N: Connect to the zero line

#### Thermal Derating Curve





#### **General Notes**

- 1. When the ambient temperature is too high or the motor reversing modules are installed closely together, the user should consider derating according to the temperature curve.
- 2. If the connected load will produce a high inrush current, pay attention to the value of whether the motor reversing module can withstand the inrush current.
- 3. Avoid using this product under strong magnetic field conditions, as strong external magnetic fields will affect the performance of this product such as turning on and off.
- 4. Reliable grounding needs to be ensured during the use of the product.

## Warnings

- 1. The product's side panels may be hot, allow the product to cool before touching.
- 2. Disconnect all power before installing or working with this equipment.
- 3. Verify all connections and replace all covers before turning on power.





